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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,464	04/17/2001	Harry M. O'Sullivan	740301-415	6002

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EXAMINER
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LELE, TANMAY S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 12/03/2003

22

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/835,464

Applicant(s)

O'SULLIVAN, HARRY M.

Examiner

Tanmay S Lele

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2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-39 is/are allowed.
- 6) ☒ Claim(s) 40-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 16, 19.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The Declaration filed on 08 October 2003 under 37 CFR 1.131 is sufficient to overcome the Labetz et al. (Labeledz, US Patent No. 4,654,867) reference.

***Response to Arguments***

2. Applicant's arguments (see paper 15, pages 5 – 12, filed 20 August 2003) with respect to claims 31, 32, 34 – 47, and 48 – 51 have been fully considered and are persuasive. The rejection of claims 31, 32, 34 – 47, and 48 – 51 has been withdrawn.

3. Applicant's arguments (declaration), see paper 18, filed 08 October 2003, with respect to the rejection(s) of claim(s) 48 – 51 under Labetz et al. (Labeledz, US Patent No. 4,654,867) and Labetz et al. (Labeledz, US Patent No. 4,654,867) in view of Goldman (Goldman, US Patent No. 4,587,652) have been fully considered and are persuasive (in light of the declaration). Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Puhl et al. (Puhl, US Patent No. 4,486,624) and Puhl et al. (Puhl, US Patent No. 4,486,624) in further view of Bench et al. (Bench, US Patent No. 4,156,867).

Examiner regrets the delay in citing the above references.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 49 recites the limitation "said processor" in lines 2 and again in line 3. There is insufficient antecedent basis for this limitation in the claim (for purposes of examination it was assumed this was the amended "microprocessor").

*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 48 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Puhl et al. (Puhl, US Patent No. 4,486,624).

Regarding claim 48, Puhl teaches of a cellular telephone data communication system for communicating data over a cellular telephone system between a fixed station and a mobile station (column 3, lines 6 – 19) comprising: at least one mobile radio transceiver coupled to a data processor (Figure 1 and column 3, lines 56 –63), said mobile radio transceiver capable of bidirectionally communicating voice and data between said mobile station and said fixed station (column 3, lines 28 –37 and column 1, lines 43 – 49; note the mobile also sends the supervisory signals), said data microprocessor capable of executing at least one application program (column 3, lines 38 –55); said application program causing said mobile radio transceiver to establish communication with said fixed station upon the occurrence of a predetermined event, said application program then sending data to said fixed station (column 3, lines 38 –55).

Regarding claim 49, Puhl teaches all the claimed limitations as recited in claim 48. Puhl further teaches of comprising an interface disposed between said radio transceiver and said data processor, said interface allowing said data processor to control said radio transceiver (Figure 1 and column 3, lines 444)–55; note data interface lies between the claimed from Figure 1).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 40, 44, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlstrom (Karlstrom, US Patent No. 4,414,661) in view of Huensch et al. (Huensch, US Patent No. 4,475,010) and in further view of "The Bell System Technical Journal" (Bell System Technical Journal, Volume 58, No 1).

Regarding claim 40, Karlstrom teaches of a computer data transmission system disposed in a vehicle for communicating bidirectional computer data messages to and from a fixed location over a network (Figures 1 and 3 and column 1, lines 7 –11 and column 5, lines 57 –59), the system comprising a radio transceiver for communicating on the network (Figure 3 and column 5, lines 59 –65), a computer originating and receiving data (Figure 3 and column 7, lines 24 –34) and an interface for providing a data path between the computer and the radio transceiver (Figure 3 and column 6, lines 12 –19), the interface containing a modem for modulating and demodulating data signals for transmission on the telephone network (Figure 3 and column 6, lines 12 –19), a controller for controlling access to the network (Figure 3 and column 7, lines 26 – 34; starting column 7, line 57 and ending column 8, line 10; and further in column 8, lines 13 –15) and whereby data are communicated between the computer in the vehicle and a fixed station over the network (Figures 1 and 3 and column 7, lines 24 – 34).

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Karlstrom does not specifically teach of a cellular telephone network and parallel signal lines between the controller and the radio transceiver including at least a transmit signal line, a receive signal line, and a control line.

In a related art dealing with mobile data communications, Huensch et al teaches of a cellular telephone network (Figure 2 and column 1, lines 6 –9 and column 3, lines 32 –36).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom's mobile data communication system, Huensch's cellular concepts, for the purposes of organizing a radio system in order to re-use frequencies and further thereby allowing location and handoff of communications between such an organized radio system, as taught by Huensch.

Karlstrom in view of Huensch do not specifically teach of parallel signal lines between the controller and the radio transceiver including at least a transmit signal line, a receive signal line, and a control line.

In a related art dealing with mobile communications, The Bell System Technical Journal teaches of parallel signal lines between the controller and the radio transceiver including at least a transmit signal line, a receive signal line, and a control line (Figures 4 and 9, of "A Subscriber Set for the Equipment Test" seen on pages 123 – 143). The Bell System Technical Journal additionally teaches of a controller for controlling access to the cellular telephone network (page 123 – 126).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom and Huensch's mobile data communication system, The Bell System

Technical Journal, for the purposes of providing a configuration commonly known in the AMPS standard, as taught by The Bell System Technical Journal.

Regarding claim 44, Karlstrom teaches of a vehicle mobile computer communications system (Figures 1 and 3 and column 1, lines 7 –11 and column 5, lines 57 –59) comprising: a radio transceiver means for communicating over a network (Figure 3 and column 5, lines 59 – 65); a computer means running at least one application program providing and receiving data (Figure 3 and column 7, lines 24 –34); an interface means disposed between said computer means and said radio transceiver means (Figure 3 and column 6, lines 12 –19), said interface means containing a modem and a controller (Figure 3 and column 6, lines 12 –19), and said interface means transferring data from said application program in said computer means to said radio transceiver means for transmission over said network and transferring received data from said radio transceiver means to said application in said computer means (column 6, lines 38 –48 and column 7, lines 24 –34).

Karlstrom does not specifically teach of a cellular telephone network and said controller accessing said radio transceiver means through parallel signal lines including at least a transmit line, a receive line and plurality of control lines.

In a related art dealing with mobile data communications, Huensch et al teaches of a cellular telephone network (Figure 2 and column 1, lines 6 –9 and column 3, lines 32 –36).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom's mobile data communication system, Huensch's cellular concepts, for the purposes of organizing a radio system in order to re-use frequencies and further thereby

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allowing location and handoff of communications between such an organized radio system, as taught by Huensch.

Karlstrom in view of Huensch do not specifically teach of parallel signal lines between the controller and the radio transceiver including at least a transmit signal line, a receive signal line, and a control line.

In a related art dealing with mobile communications, The Bell System Technical Journal teaches of said controller accessing said radio transceiver means through parallel signal lines including at least a transmit line, a receive line and plurality of control lines (Figures 4 and 9, of "A Subscriber Set for the Equipment Test" seen on pages 123 – 143). The Bell System Technical Journal additionally teaches of a controller for controlling access to the cellular telephone network (page 123 – 126).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom and Huensch's mobile data communication system, The Bell System Technical Journal, for the purposes of providing a configuration commonly known in the AMPS standard, as taught by The Bell System Technical Journal.

Regarding claim 46, Karlstrom in view of Huensch and The Bell System Technical Journal, teach all the claimed limitations as recited in claim 44. The Bell System Technical Journal further teaches of comprising dial means contained in said interface means for causing said transceiver means to place a call over said cellular communications network (page 123).

10. Claims 41 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlstrom (Karlstrom, US Patent No. 4,414,661) in view of Huensch et al. (Huensch, US Patent No. 4,475,010) and "The Bell System Technical Journal" (Bell System Technical Journal,



Volume 58, No 1) as applied to claims 40 and 44 above, and further in view of Bench et al. (Bench, US Patent No. 4,156,867).

Regarding claim 41, Karlstrom in view of Huensch and The Bell System Technical Journal, teach all the claimed limitations as recited in claim 40. Karlstrom in view of Huensch and The Bell System Technical Journal do not specifically teach of wherein the data contain error correcting bits.

In a related art dealing with a radio data communication system, Bench teaches of wherein the data contain error correcting bits (column 2, lines 2 –19).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom in view of Huensch and The Bell System Technical Journal's mobile data communication system, Bench's error correction system for the purposes of an improving data communications by providing protection against the reception of invalid messages and data, as taught by Bench.

Regarding claim 45, Karlstrom in view of Huensch and The Bell System Technical Journal, teach all the claimed limitations as recited in claim 44. Karlstrom in view of Huensch and The Bell System Technical Journal do not specifically teach of wherein said controller in said interface means inserts error correction bits into said data.

In a related art dealing with a radio data communication system, Bench teaches of wherein said controller in said interface means inserts error correction bits into said data (column 2, lines 2 –19).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom in view of Huensch and The Bell System Technical Journal's mobile

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data communication system, Bench's error correction system for the purposes of an improving data communications by providing protection against the reception of invalid messages and data, as taught by Bench.

11. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karlstrom (Karlstrom, US Patent No. 4,414,661) in view of Huensch et al. (Huensch, US Patent No. 4,475,010) and "The Bell System Technical Journal" (Bell System Technical Journal, Volume 58, No 1) as applied to claim 40 above, and further in view of Freeburg (Freeburg, US Patent No. 4,481,670).

Regarding claim 42, Karlstrom in view of Huensch and The Bell System Technical Journal, teach all the claimed limitations as recited in claim 40. Karlstrom in view of Huensch and The Bell System Technical Journal do not specifically teach of wherein said data is packetized.

In a related art dealing with mobile communications, Freeburg teaches of wherein said data is packetized (starting column 4, line 64 and ending column 5, line 8).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom in view of Huensch and The Bell System Technical Journal's mobile data communication system, Freeburg's packetized data structure, for the purposes of improved location and determination of a mobile, as taught by Freeburg.

12. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karlstrom (Karlstrom, US Patent No. 4,414,661) in view of Huensch et al. (Huensch, US Patent No. 4,475,010) and "The Bell System Technical Journal" (Bell System Technical Journal, Volume

58, No 1) and Freeburg (Freeburg, US Patent No. 4,481,670) as applied to claim 42 above, and further in view of Segarra (Segarra, US Patent No. 4,551,842).

Regarding claim 43, Karlstrom in view of Huensch, The Bell System Technical Journal, and Freeburg teach all the claimed limitations as recited in claim 42. Karlstrom in view of Huensch, The Bell System Technical Journal, and Freeburg, do not specifically teach of wherein the packetized text messages comprise packets of variable length, the length adjusted according to error rate.

In a related art dealing with error protection on a data communication network, Segarra teaches of wherein the packetized text messages comprise packets of variable length, the length adjusted according to error rate (column 5, lines 17 –20 and starting column 12, line 60 and ending column 13, line 1).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom, Huensch, The Bell System Technical Journal, and Freeburg's mobile data communication system, Segarra's variable message length provisions, for the purposes of attaining an acceptable error rate in a communications link (as a longer message length has a greater potential of containing errors), as taught by Segarra.

13. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karlstrom (Karlstrom, US Patent No. 4,414,661) in view of Huensch et al. (Huensch, US Patent No. 4,475,010) and "The Bell System Technical Journal" (Bell System Technical Journal, Volume 58, No 1) as applied to claim 46 above, and further in view of Godoshian (Godoshian, US Patent No. 4,490,579).

Regarding claim 47, Karlstrom in view of Huensch and The Bell System Technical

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Journal teach all the claimed limitations as recited in claim 46. Karlstrom in view of Huensch and The Bell System Technical Journal, do not specifically teach of wherein said application program causes said dial means to automatically place a call over said cellular communications network.

In an analogous art dealing with radio paging systems, Godoshian teaches of wherein said application program causes said dial means to automatically place a call over said cellular communications network (starting column 2, line 60 and ending column 3, line 1).

It would have been obvious to one skilled in the art at the time of invention to have included into Karlstrom, Huensch, and The Bell System Technical Journal's mobile data communication system, Godoshian's dialing program, for the purposes of dialing a number stored without much user intervention, as taught by Godoshian.

14. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Puhl et al. (Puhl, US Patent No. 4,486,624) as applied to claim 49 above, and further in view of Bench et al. (Bench, US Patent No. 4,156,867).

Regarding claim 50, Puhl teaches all the claimed limitations as recited in claim 49. Puhl does not specifically teach of wherein said interface inserts error correction bits into said data.

In a related art dealing with a radio data communication system, Bench teaches of wherein said interface inserts error correction bits into said data (column 2, lines 2 –19).

It would have been obvious to one skilled in the art at the time of invention to have included into Puhl's communication system, Bench's error correction system for the purposes of an improving data communications by providing protection against the reception of invalid messages and data, as taught by Bench.

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15. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Puhl et al. (Puhl, US Patent No. 4,486,624) as applied to claim 48 above, and further in view of Freeburg (Freeburg, US Patent No. 4,481,670).

Regarding claim 51, Puhl teaches all the claimed limitations as recited in claim 48. Puhl does not specifically teach of wherein said data is packetized.

In a related art dealing with mobile communications, Freeburg teaches of wherein said data is packetized (starting column 4, line 64 and ending column 5, line 8).


It would have been obvious to one skilled in the art at the time of invention to have included into Puhl's communication system, Freeburg's packetized data structure, for the purposes of improved location and determination of a mobile, as taught by Freeburg.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

  
Tanmay S Lele  
Examiner  
Art Unit 2684

  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER

tsl  
November 24, 2003